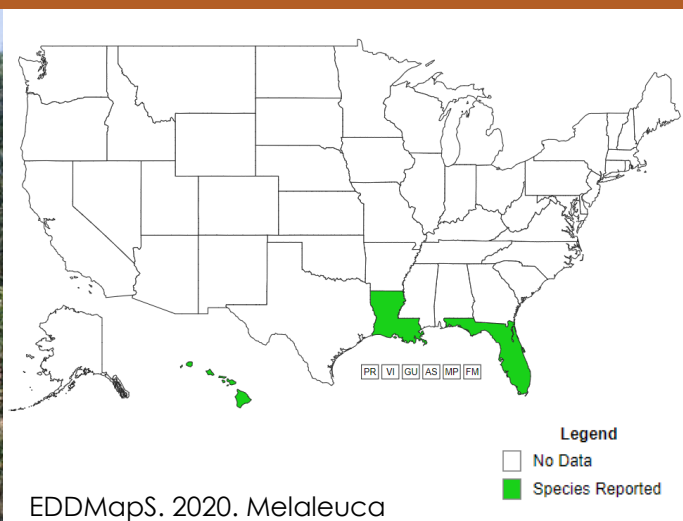


USACE Invasive Plant Species Best Management Practices

Melaleuca (*Melaleuca quinquenervia*) - Myrtaceae (Myrtle)



Habitat & Life History

Low-lying, high rainfall areas (coastal regions) – Native to Australia, New Guinea, New Caledonia –
FAC & FACW – Reproduces sexually and asexually

Integrated Management Strategy Selections

Prevention Chemical Biological Mechanical Cultural



PREVENTION

- Education on the impacts of Melaleuca



CHEMICAL CONTROL

- Herbicides—glyphosate, imazapyr, triclopyr
- Use-pattern—foliar spray, cut/paint, basal oil, injection, hack & squirt
- *Refer to product label for specific instructions on rate & use-pattern



BIOLOGICAL CONTROL

- Agent—*Oxyops vitiosa* (melaleuca weevil), *Boreioglycaspis melaleucae* (melaleuca psyllid), *Fergusonina turneri* (melaleuca gall-wasp)
- Release—Field collection & transport, viable plant materials may be required



MECHANICAL CONTROL

- Hand pull, dig roots, girdle
- Cutting or land-clearing



CULTURAL CONTROL

- Prescribed burning for seedlings (timing must account for "seed rain")
- Establish competitive native understory/ground cover to reduce invasive seedling success



MANAGEMENT SEQUENCING

- Timing of control methods—best option is to apply chemical measures during early development if possible, avoid disturbing the life cycle of biological control agent
- Monitoring—observe after 6-8 weeks, re-treat or remove tree stumps; be mindful of erosion potential
- Niche-filling/Restoration—improve biodiversity & composition with native plantings; erosion soft-armoring



COMMENTS

- "Rains" seeds after management efforts, control during fall or winter (sometimes spring) to minimize seedling survival (dry periods), fire may promote induce seed rains, resprouts from cut stumps, mechanical most effective with herbicides



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Contributors, data sources, documentation @ apcrp.el.erdc.dren.mil